

WE CLAIM:

1. An isolated DNA molecule which is polymorphic for the alpha (1,2) fucosyltransferase gene 1 in swine.

2. An isolated DNA molecule having a nucleotide sequence in accordance with FIG. 1.

3. The isolated DNA molecule of claim 2 wherein adenine is in nucleotide position 307 instead of guanine.

4. An isolated DNA molecule which is complementary to the nucleotide sequence of claim 2.

5. The isolated DNA molecule of claim 2 with a substitution of adenine for guanine in nucleotide position 857.

6. An isolated DNA molecule according to claim 2 with a threonine in nucleotide position 229.

7. A portion of the isolated DNA molecule of claim 1 or 2, said portion including the nucleotide sequence that distinguishes *E. coli* colonization resistant from sensitive swine.